

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A folding knife comprising:
a reference piece having an arcuate slot with a convex extension slot positioned at one end of the arcuate slot;
a latch cam having an offset pin at least partially engaged in at least one of the arcuate slot or convex extension slot;
a blade having a hole configured to receive the latch cam; and
a spring mechanically coupled to the offset pin and configured to exert a force on the offset pin in a direction of blade opening.
2. (Original) The knife of Claim 1, further comprising:
a pivot pin; and
wherein the blade further comprises an additional hole configured to receive the pivot pin, and the blade is configured to rotate about an axis of the pivot pin.
3. (Original) The knife of Claim 1, wherein the reference piece comprises a liner.
4. (Original) The knife of Claim 1, wherein the reference piece comprises a handle.
5. (Original) The knife of Claim 1, wherein the offset pin is positioned substantially in the convex extension slot when the blade of the knife is rotated less than a predetermined angle.
6. (Original) The knife of Claim 5, wherein the force exerted by the spring on the offset pin is substantially impeded by at least one wall of the convex extension slot.

7. (Original) The knife of Claim 1, wherein the offset pin is positioned substantially in the arcuate slot when the blade of the knife is rotated greater than a predetermined angle.

8. (Original) The knife of Claim 7, wherein the force exerted by the spring on the offset pin substantially assists the opening of the blade.

9. (Original) The knife of Claim 7, wherein the force exerted by the spring on the offset pin rotates open the blade without additional external force.

10. (Original) The knife of Claim 1, further comprising:
a flipper positioned on a side of the knife opposite a side from which the blade is removed, the flipper configured to receive an external force that at least partially rotates open the blade.

11. (Original) The knife of Claim 10, wherein the flipper comprises a protrusion on the knife extending through the side of the knife opposite the side from which the blade is removed.

12. (Original) The knife of Claim 11, wherein the blade opens substantially under the force of the spring when an edge of the flipper is flush with an edge of a knife handle.

13. (Original) The knife of Claim 11, wherein the blade opens substantially under the force of the spring when an edge of the flipper is above an edge of a knife handle.

14. (Original) The knife of Claim 1, further comprising a stud mechanically coupled to the blade and configured to receive an external force that at least partially rotates open the blade.

15. (Original) The knife of Claim 1, wherein the spring comprises a torsional spring wound around a pivot axis of the blade.

16. (Original) The knife of Claim 1, wherein the spring substantially rotates the blade to a fully open position when the offset pin is positioned substantially within the arcuate slot.

17. (Original) The knife of Claim 1, wherein the spring comprises:
a first spring positioned to a left of the blade; and
a second spring positioned to a right of the blade.

18. (Original) The knife of Claim 1, further comprising a handle configured to position a portion of the spring.

19. (Original) The knife of Claim 1, wherein an angle from a line tangent to the arcuate slot at a connection to the convex extension slot to a centerline of the convex extension slot measures less than 180 degrees.

20. (Original) The knife of Claim 1, wherein an angle from a line tangent to the arcuate slot at a connection to the convex extension slot to a centerline of the convex extension slot measures less than 135 degrees.

21. (Original) The knife of Claim 1, wherein an angle from a line tangent to the arcuate slot at a connection to the convex extension slot to a centerline of the convex extension slot measures greater than 90 degrees.

22. (Original) A folding knife comprising:
a latch cam having an offset pin;
a liner having an arcuate slot and a convex extension slot, and configured to position the offset pin in the convex extension slot when the knife is in a closed position and position the offset pin in the arcuate slot when the knife is fully open;
a blade configured to rotate about a pivot axis, and having a hole configured to receive the latch cam, the latch cam rotating in a direction that is opposite to a direction of blade rotation when the blade is open less than a predetermined angle.

23. (Original) The knife of Claim 22, further comprising:

a torsional spring configured to exert a force on the blade in the direction of blade opening.

24. (Original) The knife of Claim 23, wherein the torsional spring exerts a force sufficient to open the blade to a fully open position when the offset pin is located substantially within the arcuate slot.

25. (Canceled)

26. (Currently amended) A method of positioning a blade of a folding knife, the method comprising:

receiving at a closed knife an external force configured to open the blade;
moving a position of an offset cam pin from within a convex extension to
substantially within an arcuate slot; and

applying an opening force configured to open the blade to a fully open position
without additional external force;

~~The method of Claim 25~~, wherein the act of moving the position of the offset cam pin comprises rotating a latch cam positioned in a hole in the blade to move the offset cam pin from the convex extension to substantially within the arcuate slot.

27. (Currently amended) A method of positioning a blade of a folding knife, the method comprising:

receiving at a closed knife an external force configured to open the blade;
moving a position of an offset cam pin from within a convex extension to
substantially within an arcuate slot; and

applying an opening force configured to open the blade to a fully open position
without additional external force;

~~The method of Claim 25~~, wherein the act of moving the position of the offset cam pin comprises rotating a latch cam in a direction that is opposite to a direction of rotation of the blade.

28-30. (Canceled)